Spoilers Spoil Go-Around

Tail strike follows bounced landing.

BY MARK LACAGNINA

The following information provides an awareness of problems in the hope that they can be avoided in the future. The information is based on final reports by official investigative authorities on aircraft accidents and incidents.

JETS

Expanded Training Recommended

Boeing 727-200. Minor damage. No injuries.

The flight crew was conducting a cargo flight from Moncton, New Brunswick, Canada, to Hamilton, Ontario, the night of July 22, 2008. The first officer was the pilot flying. He had 2,900 flight hours, including 75 hours as a first officer and 1,100 hours as a second officer in 727s. The captain, whose 9,500 flight hours included about 7,500 hours in type, was the pilot monitoring. The second officer had 1,600 flight hours, including 600 hours in type.

"This was the first time this crew had operated together, and it was the fourth flight of their pairing," said the report by the Transportation Safety Board of Canada (TSB).

The weather at Hamilton Airport was influenced by thunderstorms. The most recent meteorological report, issued at 2200 local time, included winds from 270 degrees at 10 kt, gusting to 16 kt, 1 1/2 mi (2,400 m) visibility in heavy rain, scattered clouds at 1,200 ft and a 3,200-ft overcast. Temperature and dew point both were 17° C (63° F).

Nearing Hamilton, the crew briefed for an approach to Runway 30, which had an available landing distance of 9,600 ft (2,926 m). "During the descent, air traffic control (ATC) advised that the winds were now favoring Runway 06 and that [the crew] could now expect an approach to Runway 06," the report said. "The crewmembers navigated around a thunderstorm and, although they had the airport in sight, prepared for a nonprecision approach to Runway 06, which has an [available landing distance] of 6,000 ft [1,829 m]."

While being vectored for a visual approach, the crew was told that a pilot who had landed a Cessna Caravan on Runway 06 at 2209 reported that flight conditions were smooth during the approach, with no wind shear, and that braking action was fair.

Shortly after the crew established the 727 on downwind, the airport traffic controller told them that winds were from 050 degrees at 10 kt and that the runway was wet and might be contaminated with standing water. "Because the first officer had little flying experience on this aircraft type, the crewmembers assessed the option of switching flying duties because the landing would now be on the shorter runway," the report said. "They concluded that it was acceptable for the first officer to fly the approach and landing.

"They flew a stabilized approach, using guidance from the precision approach path indicator (PAPI). Due to the limited FDR [flight data recorder] parameters, it could not be determined why, after a stabilized approach, the aircraft touched down at a high rate of descent [about 350 fpm]."

The report also noted that the 30 minutes of information recorded by the cockpit voice recorder during the accident flight had been overwritten because of a delay by maintenance

personnel in removing power from the system after the accident.

Among the 11 parameters recorded by the FDR was vertical acceleration. The flight data showed that vertical acceleration was 1.9 g on the first touchdown, which occurred about 1,200 ft (366 m) from the approach threshold. The 727 bounced about 8 ft (2 m) and touched down again with a vertical acceleration of 2.3 g.

"Following company procedures, after the second touchdown the first officer deployed the spoilers using the speed brake lever," the report said. "As the first officer was reaching for the thrust reverser handles, the captain took control of the aircraft and initiated a go-around." The aircraft was 2,500 ft (762 m) from the end of the runway.

The drag produced by the spoilers prevented the aircraft from becoming airborne.

The takeoff configuration warning horn sounded because the spoilers remained deployed as go-around thrust was applied and the flaps were retracted from 30 degrees to either 25 degrees or 15 degrees.

The captain rotated at about 115 kt. However, the drag produced by the spoilers prevented the aircraft from becoming airborne, and the tail skid struck the runway. About 300 ft (91 m) from the departure end, the captain moved the thrust levers full forward. "Shortly thereafter, the main wheels came off the ground and the landing gear was retracted," the report said. "At the same time, the captain noticed that the spoilers were deployed and immediately stowed them."

As the aircraft became airborne, the no. 2 engine tail pipe and thrust reverser actuator fairing struck the ground off the end of the runway, leaving a 12-ft (4-m) scar on the turf. The crew subsequently landed the 727 without further incident on Runway 12.

Investigators determined that after the second bounce, the crew could have either brought the aircraft to a stop on the runway or flown away safely *if* the spoilers had been retracted at the initiation of the go-around.

The operator's training program required flight crews to practice several different procedures in a flight simulator, but none required spoiler retraction at the initiation of a go-around (*ASW*, 9/09, p. 11). Although bounced landing recovery procedures were described in Boeing's *Maneuvers Manual*, they were not included on the operator's training syllabus. "Canadian operators are not required to train their crews in the recovery of bounced landings," the report noted.

Citing three other recent accidents in which Canadian-registered aircraft were substantially damaged during bounced landings, the TSB recommended that the Canadian Department of Transport "require air carriers to incorporate bounced landing recovery techniques in their flight manuals and to teach these techniques during initial and recurrent training."

Wheel Brakes Locked on Touchdown

Airbus A320-321. Substantial damage. No injuries.

The A320 was en route with 133 passengers and seven crewmembers from Jakarta, Java, Indonesia, to Medan, North Sumatra, the morning of June 1, 2008. During final approach to Runway 05 at Polonia Airport in visual meteorological conditions (VMC), the flight crew saw an unsafe indication for the left main landing gear. The pilot-in-command (PIC) initiated a go-around, climbed to 5,000 ft and entered a holding pattern.

The crew held for 45 minutes and recycled the landing gear several times. The unsafe gear indication persisted. "The PIC then instructed the copilot to do the landing gear extension manually, which he did several times without any change to the landing gear indication," said the report by the Indonesian National Transportation Safety Committee.

The crew then consulted the quick reference handbook (QRH) procedures for landing with an abnormal gear configuration. One of the procedures was to ensure that brake pressure does not exceed 1,000 psi.

Airport emergency services were standing by when the A320 was landed on Runway 05 according to the QRH procedures — with the exception that brake pressure was 4,032 psi, "significantly higher than the QRH-specified maximum brake pressure," the report said.

The main landing gear was down and locked on touchdown, but three wheels failed to rotate, and their tires burst. The aircraft was stopped on the 2,900-m (9,515-ft) runway after rolling about 1,200 m (3,937 ft). "The aircraft could not be taxied from the runway to the apron, nor could it be towed to the apron due to damage to the wheels," the report said. The passengers and crew disembarked normally using the forward left door and airstairs. The runway was closed for seven hours while the aircraft was examined and the damaged wheels were replaced.

The examination revealed that the left main landing gear down-lock cable was broken and had caused an erroneous gear-unsafe indication. The cable was shorter than normal. Investigators determined that the cable might have been shortened during previous maintenance involving replacement of the proximity switch.

Investigators also determined that a hydraulic lock had jammed the brakes and prevented the three wheels from rotating on touchdown. The hydraulic lock "was the result of an incorrect manual landing gear extension procedure used by the pilots," the report said. Contrary to guidance in the aircraft flight manual, the copilot had stowed the emergency landing gear extension handle after manually cranking down the gear. According to the report, this caused the return line to the hydraulic fluid reservoir to remain closed, trapping the excessive hydraulic pressure that had built in the landing gear and brake lines during the crew's repeated efforts to extend the gear.

Slide Inflation Causes Control Problem

McDonnell Douglas MD-81. Minor damage. No injuries.

The MD-81 had been chartered to transport 45 passengers, including "a political candidate, his staff, news reporters and U.S. Secret Service personnel," from Chicago Midway International Airport to Charlotte, North Carolina, the morning of July 7, 2008, said the report by the U.S. National Transportation Safety Board (NTSB). Media reports identified the political candidate as Barack Obama.

During initial climb, an uncommanded increase in the airplane's nose-up pitch attitude occurred. The pitch attitude "exceeded normal limits before the captain was able to regain control," the report said. "Although the flight crew was able to regain airplane control, a significant restriction in pitch control still remained."

The crew diverted the flight to Lambert–St. Louis International Airport and landed the airplane without further incident. The report noted that "normal pitch control pressures returned" during the descent.

Examination of the MD-81 revealed that an emergency evacuation slide had inflated inside the tail cone during lift-off at Chicago. "The pitch control restriction was caused by the inflated slide and a subsequently damaged walkway railing that impinged on a set of elevator cables in the tail cone," the report said. "The investigation further revealed that the slide cover had not been secured to the floor fittings on the walkway before the flight.

The pitch attitude exceeded normal limits before the captain was able to regain control.

"It could not be determined why the slide's cover was not secured. In normal circumstances, the cover is secured by the mechanic who installs it and should remain secured until it is removed from the airplane."

FDR data indicated that inertial loads during rotation were of sufficient magnitude and duration to allow the unsecured slide cover to open and initiate slide inflation. "Post-incident testing showed that the slide pack could not have rotated enough to activate its inflation cylinder if the slide container had been properly secured," the report said. "Further, a properly secured slide cover would have contained the slide if the inflation cylinder had improperly discharged."

A service check of the slide had been performed about a month before the incident occurred. "That check was a general visual examination … which included inspection of the forward tie-down straps that secure the slide cover to the floor fittings," the report said. "There would be no reason for the mechanic to touch the straps during this inspection."

After the service check, the MD-81 had made three flights with presidential candidates aboard. "Security sweeps" by U.S. Secret Service personnel had been performed before each

flight. A post-incident investigation by the Secret Service concluded that the sweeps had not "interfered with or altered the aircraft's hardware or systems related to the tail cone evacuation slide," the report said.

Two previous inadvertent inflations of tail cone evacuation slides in MD-80-series airplanes had been reported. "The causes of each of these inflations could not be definitively determined," the report said. "No actions were taken."

Odor Traced to Hot Generator Control

Boeing 737-600. Minor damage. No injuries.

The 737 was en route from Stockholm, Sweden, to Oslo, Norway, on Oct. 24, 2008, when the warning light for the left engine-driven generator illuminated. "The system was checked while the aircraft was on the ground by a flight technician, and no fault or abnormality was found in the generator system," said the report by the Swedish Accident Investigation Board. "The aircraft was then cleared for the return flight to Stockholm [with 97 passengers and six crewmembers]."

Shortly after reaching cruise altitude, Flight Level 330 (approximately 33,000 ft), the flight crew detected the odor of burned electronics. "At about the same time, the cabin staff reported that there was a smell of burning in the passenger cabin," the report said. "Soon thereafter, the master warning lamp lit, and simultaneously the left generator warning lamp lit."

After transferring control to the first officer, the captain conducted the emergency checklist.

The crew began an expedited descent toward Stockholm/Arlanda Airport. However, when the odor became stronger, the crew donned their oxygen masks, declared an emergency and diverted to Stockholm/Västerås Airport, "which they assessed as the most suitable alternative," the report said.

After transferring control to the first officer, the captain conducted the emergency checklist. "After a rapid descent, a normal approach and landing were performed," the report said. The flight crew stopped the aircraft on the runway and ordered an emergency evacuation. Despite problems opening the doors on the right side of the cabin and inflating the slides, the evacuation was rapid and without injury.

A technical investigation revealed that the left generator control unit (GCU) had overheated. The GCU was replaced, but the replacement unit also overheated during the subsequent ferry flight to Stockholm/Arlanda Airport.

The report said that after previous, similar faults had been found in 737-series aircraft, Boeing had issued service bulletins recommending repositioning of some GCU connector pins "to reduce the risk of an electrical flash-over." After the incident, the operator modified all the 737s in its fleet according to the service bulletins.

Hot Landing Rejected Too Late

Cessna Citation 500. Destroyed. Two fatalities, one minor injury.

The pilot was conducting a personal flight with one passenger from Wichita Falls, Texas, U.S., to Conway, Arkansas, on June 30, 2007. There was convective activity along the route, but VMC prevailed at the destination. The pilot was cleared by ATC to conduct a visual approach to the uncontrolled airport.

An employee of a fixed-base operator (FBO) responded to the pilot's radio call for an airport advisory. "He told the pilot that the winds were out of the west between 5 and 10 kt, surface visibility was 10 mi [16 km] and that the runway was wet from a recent rain shower," said the NTSB report.

The airplane was an early model Citation that had been modified with wing extensions and certified for single-pilot operation. The pilot, 72, had 5,575 flight hours and held a type rating; his time in type was not determined during the investigation.

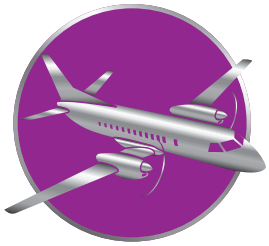
The Citation was not equipped with thrust reversers or anti-skid brakes but did have a wheel-skid warning system. The runway was 4,875 ft (1,486 m) long. Assuming proper operation of the airplane, investigators calculated a landing distance of 4,789 ft (1,460 m) on a runway contaminated by standing water. However, recorded ATC radar data indicated that when the jet was about 1/4 mi (2/5 km) from the threshold of Runway 26, airspeed was 120 kt, or 16 kt above the appropriate landing reference speed (VREF), and the descent rate was 1,150 fpm.

The passenger later told investigators that the runway was "soaked and shiny with water" and that the airplane landed hard and "fish-tailed."

The FBO employee did not see where the Citation touched down but said that it "did not slow enough to stop" on the runway and that the pilot "added power at the last second." Another witness said that the airplane was "traveling at a high rate of speed" at midfield and that the pilot initiated the go-around with about 1,220 ft (372 m) of runway remaining.

The Citation overran the runway and struck a jet-blast deflector and the airport perimeter fence. It then crossed a road and struck a "residential structure," the report said. The pilot and a person inside the residential structure were killed; the passenger sustained minor injuries.

The probable causes of the accident were "the pilot's failure to fly a stabilized approach and his delayed decision to abort the landing," the report said. "Contributing to the accident was the standing water on the runway."



TURBOPROPS

Steep Turn, Stall on Short Final

Beech King Air A100F. Destroyed. Two fatalities.

Instrument meteorological conditions (IMC) prevailed for the positioning flight from Val-d'Or to Chibougamau, both in Quebec, Canada, the morning of Oct. 25, 2007. The TSB report said that the pilots had limited experience in instrument flight rules operations.

The PIC had flown in the West Indies before being hired by the Canadian charter operator a month before the accident. He had 1,800 flight hours, including 123 hours in type. Almost all of the copilot's flight experience had been in VMC before he joined the company four months before the accident. He had 1,022 flight hours, including 72 hours in type. "They had worked together as flight crewmembers three times since they were hired," the report said.

Chibougamau's Chapais Airport had a partially obscured sky, an overcast at 700 ft, 2 mi (3,200 m) visibility in fog and winds from 260 degrees at 6 kt. Nearing the airport from the southwest, the pilots prepared to conduct the NDB/DME (nondirectional beacon/distance measuring equipment) approach to Runway 05.

During descent, however, the PIC began programming the global positioning system (GPS) receiver for the area navigation approach to Runway 05. "Neither of the pilots was authorized or trained to use GPS as a primary source of navigation for an instrument approach," the report said, noting that the PIC spent nine minutes programming the GPS receiver but abandoned the effort about 15 nm (28 km) from the runway.

The pilots did not adhere to standard operating procedures. They did not activate the radio-controlled airport lights or announce the aircraft's position, and they were late in configuring the King Air for the approach. When the runway came in sight, the aircraft was not in position for a safe landing, and the crew conducted a missed approach.

During the second approach, the King Air crossed the final approach fix with a groundspeed of 150 kt. Shortly thereafter, the landing gear was extended and the flaps were lowered to the approach position. The aircraft was 500 ft above ground level (AGL) when the PIC saw the runway threshold about 0.7 nm (1.3 km) to the right. "The copilot transferred the controls to the PIC, and the flaps were lowered completely," the report said. "A right turn was made to direct the aircraft toward the runway, followed by a steep left turn to line up with the runway centerline."

The report said that the King Air's wings-level stall speed was 71 kt, but the aircraft stalled at 100 kt, V_{REF}, because of the increased load factor induced by the steep left turn. The stall occurred at about 100 ft AGL. Bank angle was 55 degrees and pitch attitude was 20 degrees nose-down when the aircraft struck the runway at a high rate of descent.

Control Loss Occurs in Night IMC

Cessna 208B. Destroyed. 10 fatalities.

After a weekend of skydiving in Star, Idaho, U.S., the pilot and nine parachutists were returning to their home base, Shelton, Washington, the night of Oct. 7, 2007. The

pilot initially flew the unpressurized airplane at 12,500 ft but then climbed to 14,500 ft and maintained that altitude for more than one hour.

The pilot did not use supplemental oxygen. "He was instrument-rated but had logged a total of two hours of actual instrument flight time," the NTSB report said. "Company policy was to fly under visual flight rules [VFR] only, and they had not flight-checked the pilot for instrument flight."

ATC radar data showed that the airplane made a series of 360-degree turns while climbing and descending. "The recorded radar data indicated that the pilot was likely maneuvering to go around, above or below rain showers or clouds while attempting to maintain VFR," the report said. "The airplane likely entered clouds during the last three minutes of flight, and possibly icing and turbulence."

The Caravan stalled, and its descent rate reached nearly 8,000 fpm before it struck mountainous terrain near Naches, Washington.

The report said that the probable cause of the accident was "the pilot's failure to maintain an adequate airspeed … while maneuvering" and that contributing factors included "the pilot's impaired physiological state due to hypoxia, the pilot's inadequate preflight weather evaluation and his attempted flight into areas of known adverse weather."

Hydraulic Leak Disables Gear

Hawker Beechcraft 1900D. Substantial damage. No injuries.

En route on a scheduled flight with 15 passengers from Timaru, New Zealand, the morning of June 18, 2007, the flight crew was unable to extend the landing gear while conducting an instrument landing system approach to Wellington, where IMC prevailed.

The crew performed a missed approach. Further attempts to lower the landing gear using the normal and manual extension systems were unsuccessful. "The captain reported that, as he operated the [manual] pump handle, he felt no resistance or pressure that would normally be expected," said the report by the New Zealand Transport Accident Investigation Commission.

The crew diverted the flight to Woodbourne, which was clear of cloud, and, "having exhausted all possible options to lower the landing gear and aware of the amount of fuel remaining, prepared the aircraft for a wheels-up landing," the report said. "On first contact with the runway, the first officer started to shut down the engines while the captain kept the aircraft straight. The aircraft took nearly 15 seconds to come to a halt, after which the crew completed securing the aircraft and the passengers started to vacate the aircraft using all four exits. … None of the occupants required assistance to vacate the aircraft, and there were no injuries."

Examination of the 1900 revealed a fatigue crack in the hydraulic actuator for the right main landing gear. "[This] allowed hydraulic fluid to escape, which prevented the crew from lowering the gear by either the normal or emergency systems," the report said. The hydraulic actuator failure occurred after about 11,900 landing gear cycles. An unrelated failure of the hydraulic fluid low-level sensor also had occurred.

PISTON AIRPLANES

Broken Exhaust Pipe Causes Fire

Piper Chieftain. Substantial damage. No injuries.

The Chieftain was at 1,000 ft AGL, departing for a cargo flight from Portland, Oregon, U.S., in VMC the morning of Oct. 14, 2008, when left engine manifold pressure decreased about 6 in and the engine began to surge. "The left cylinder head temperature was reading zero degrees, but all other gauges were normal," the NTSB report said.

The pilot told investigators that she believed the turbocharger had failed. "No smoke or flames were noticed as the pilot returned to the airport for landing without declaring an emergency or shutting down the engine," the report said. "During taxi to the ramp, the engine lost power."

Examination of the engine revealed that the exhaust pipe that extends from the right cylinder head had fractured because of fatigue cracking of the flange beneath the clamp that attaches the pipe to the turbocharger waste gate. The fatigue cracking was induced by failure of the slip joints within the exhaust pipe system, the report said, noting that there also was "evidence of a fire in the accessory section and a burned-through section of the skin."

Misplaced Selector Blocks Fuel Flow

Beech H18. Destroyed. One serious injury.

The right engine lost power at about 100 ft AGL during departure from Fort Lauderdale (Florida, U.S.) Executive Airport for a cargo flight the afternoon of Sept. 21, 2007. "Performance calculations indicate that … the airplane would most likely not have been able to continue the departure on one operating engine," the NTSB report said.

The pilot declared an emergency, announcing that he could not maintain altitude, and looked for a place to land. Airspeed decreased below VMC, the minimum control speed with the critical engine inoperative, and the airplane rapidly rolled right and entered an uncontrolled descent.

The landing gear was retracted, the throttles and mixture controls were full forward, and the propeller on the right engine was feathered when the airplane struck the ground. The pilot sustained serious injuries.

Investigators determined that the engine had failed because of fuel starvation. The fuel selector had been positioned between the auxiliary tank and fuel cut-off detents, and no fuel was found downstream of the fuel selector.

The report also said that the cargo had been misloaded. Gross weight was near maximum, and the center of gravity (CG) was 1 to 6 in (3 to 15 cm) aft of the aft limit, "which would have created instability in the handling characteristics of the airplane, especially after a loss of engine power," the report said. "In addition, the aft-of-limit CG would have increased the airspeed needed to prevent the airplane from entering a VMC roll."

HELICOPTERS

Rag Entangles Tail Rotor Drive Shaft

Agusta Westland A109E. Substantial damage. One serious injury.

Approaching the destination, Dunshaughlin, Ireland, at 800 ft during a ferry flight on March 28, 2008, the pilot heard a loud bang before the helicopter pitched nose-up and yawed right. The pilot told ATC, "I seem to have a bit of a problem here." He then declared an emergency and said that he had to make an emergency landing.

"The helicopter landed heavily on soft ground and rolled over onto its left side," said the report by the Irish Air Accident Investigation Unit.

During the initial examination of the wreckage, "some cleaning-cloth material was found entangled on the long tail rotor drive shaft, between the first and second bearing," the report said. "It was also found that the drive shaft had completely severed just forward of the second bearing, thus cutting off the vital drive to the tail rotor gearbox."

Investigators were unable to "absolutely determine when and by whom the cloth was left in the area of the tail rotor drive shaft," the report said.

Low Visibility Cited in Gulf Crash

Bell 206L1. Destroyed. One fatality, one serious injury, two minor injuries.

The LongRanger was nearing a platform in the Gulf of Mexico the afternoon of Dec. 29, 2007, when weather conditions deteriorated below the operator's minimums of a 500-ft ceiling and 3 mi (5 km) visibility. The pilot lost control as he maneuvered to slow the helicopter. All four occupants survived the impact, but one subsequently suffered hypothermia and drowned, the NTSB report said.

The report said that the probable causes of the accident were "the pilot's decision to continue … in weather conditions below the company's minimums and his failure to maintain aircraft control during the approach."

Contributing factors were the absence of a passenger briefing on life raft deployment, the pilot's failure to deploy life rafts and a company radio operator's inaccurate report that the helicopter had landed — an error that delayed the start of rescue efforts, the report said.

Preliminary Reports, August 2009

Date	Location	Aircraft Type	Aircraft Damage	Injuries
Aug. 1	Nairobi, Kenya	Cessna U206	destroyed	2 fatal, 2 minor
The pilot and front-seat passenger were killed when the 206 struck a power line and a building during an aerial photography flight.				
Aug. 1	West Point, Virginia, U.S.	Beech King Air B90	substantial	1 fatal, 6 none
A skydiving instructor was standing near the open cabin door when his reserve parachute deployed and pulled him out of the King Air, where he was struck by the horizontal stabilizer.				
Aug. 2	Oksibil, Indonesia	de Havilland DHC-6	destroyed	15 fatal
The Twin Otter was on a scheduled passenger flight from Jayapura to Oksibil when it struck a mountain at 9,300 ft about 42 km (23 km) from the destination.				
Aug. 4	Nahanni Butte, Northwest Territories, Canada	Robinson R44	destroyed	2 fatal, 1 serious
During an attempted ridge landing, the helicopter rolled down a steep slope, killing both passengers.				
Aug. 4	Koh Samui, Thailand	ATR 72-212A	destroyed	1 fatal, 4 serious, 68 NA
The captain was killed when the aircraft veered off the runway and struck the airport traffic control tower.				
Aug. 5	Paris, France	Airbus A320-211	minor	NA
Six people reportedly were injured when an engine caught fire while the A320 was being pushed back from a gate at Paris Orly Airport.				
Aug. 8	Hoboken, New Jersey, U.S.	Eurocopter AS 350BA, Piper PA-32R	destroyed	9 fatal
Six people aboard the air tour helicopter and three people aboard the single-engine airplane were killed when the aircraft collided 1,100 ft over the Hudson River.				
Aug. 11	Kokoda, Papua New Guinea	de Havilland DHC-6	destroyed	13 fatal
The Twin Otter struck a mountain at 5,500 ft during a go-around in adverse weather conditions.				
Aug. 12	Eden Prairie, Minnesota, U.S.	Beech E18S	destroyed	2 fatal
Witnesses said that the Twin Beech was flying erratically while circling the airport at about 500 ft shortly after takeoff. The airplane then rolled left and descended to the ground.				
Aug. 13	Minidoka, Idaho, U.S.	Beech A60 Duke	substantial	2 minor
The airplane flipped over during a forced landing after losing power from both engines.				
Aug. 14	Lytton, British Columbia, Canada	Bell 212	destroyed	1 fatal
The helicopter crashed into a river while fighting a forest fire.				
Aug. 14	Évora, Portugal	Beech 99	destroyed	2 fatal
The airplane lost power from one engine during a skydiving flight and then struck a building during a go-around at the Évora airport.				
Aug. 16	Taiping, Malaysia	Avcen Jetpod	destroyed	1 fatal
The prototype twin-engine jet crashed shortly after takeoff for its first test flight.				
Aug. 16	Caracas, Venezuela	Britten-Norman BN-2A	substantial	10 NA
The Islander was ditched offshore during approach to the Caracas airport. No fatalities were reported.				
Aug. 17	North Captiva Island, Florida, U.S.	Eurocopter EC 145	substantial	3 none
Dark night visual meteorological conditions (VMC) prevailed when the emergency medical services (EMS) helicopter struck the water while approaching a landing site to pick up a patient.				
Aug. 21	Teterboro, New Jersey, U.S.	Beech 58 Baron	destroyed	2 serious
Night VMC prevailed when the Baron overshot the runway while landing and crashed into a vacant warehouse.				
Aug. 22	Hamburg, Germany	Cessna T206H	substantial	2 fatal, 1 none
Both passengers were killed when the float-equipped airplane flipped over while landing on the Elbe river.				
Aug. 22	Cortina d'Ampezzo, Italy	Agusta A109S	destroyed	4 fatal
The helicopter struck power lines during an EMS flight in adverse weather conditions.				
Aug. 26	La Tortuga, Venezuela	Cessna 208B	destroyed	2 minor, 11 none
The Caravan was ditched after the engine lost power during a scheduled passenger flight.				
Aug. 26	Nganga Lingolo, Congo	Antonov An-12	destroyed	6 fatal
Night VMC prevailed when the cargo airplane crashed in a cemetery during approach to Brazzaville.				

NA = not available

This information, gathered from various government and media sources, is subject to change as the investigations of the accidents and incidents are completed.